AMENDMENT TO THE SPECIFICATION

Please amend the specification as described below.

Please replace paragraphs [0209]-[0214] with the following paragraph.

respective genomic sequences and genomic locations are set forth in Tables 1-3, hereby incorporated herein. Specifically, in Table 1, line The nucleotide sequence of each of a plurality of GAM oligonucleotides that are described by Fig. 1 and their 241237, GAM RNA (miRNA) as set forth in SEQ ID NO: 117937 is shown as predicted from human herpesvirus 5. --[0209]

				•	1
GAM	GAM NAME GAM RNA SEQUENCE	GAM RNA	SEQUENCE	GAM ORGANISM	GAM
SEQ-ID					POS
	=======	=======			====
117937	GAM501831	AGTGACGG	117937 GAM501831 AGTGACGGTGAGATCCAGGCTG	Human herpesvirus 5	\A

In Table 2, lines 4474648-4474741, describes GAM PRECURSOR RNA (hairpin) as set forth in SEQ ID NO: 4204050 and as it relates to Figures 1-8.

	ı			
GAM NAME	GAM	PRECUR	PRECUR PRECURSOR	OR GAM DESCRIPTION
:	ORGANISM	SEQ-ID	SEQUENCE	
	*************	2000		
GAM501831	Human herp	420405	GACAGCCTC	Human herp 420405 GACAGCCTCC Fig. 1 further provides a conceptual description of another novel,
Ξ	esvirus 5	0	GGATCACAT	GGATCACATG bioinformatically-detected viral oligonucleotide of the present invention,
			GTTACTCAG	GITACTCAGC encoded by the Human herpesvirus 5 genome, referred to here as the Genomic
			GTCTGCCAG	GTCTGCCAGC Address Messenger 501831 (GAM501831) oligonucleotide, which modulates
			CTAAGTGAC	CTAAGTGACG expression of respective target genes whose function and utility are known
			GTGAGATCC	TGAGATCCA in the art.
			GGCTGTC	GAM501831 is a novel, bioinformatically detectable, regulatory,
				non-protein-coding, miRNA-like oligonucleotide. The method by which
				GAM501831 is detected is described with additional reference to Figs. 1-8.
				The GAM501831 precursor, herein designated GAM PRECURSOR, is encoded by the
				Human herpesvirus 5 genome , which is a DNA virus. GAM501831 target gene,
				herein designated GAM TARGET GENE, is a target gene encoded by a target
				organism specified in Tables 6-7.

H-100103MkD 4-1H	
THE GAMOULOST PLECULSOL, HELETH GESTYHACEU GAN FRECUNSON,	
GAM501831 precursor RNA, herein designated GAM PRECURSOR RNA. Similar to	to
other miRNA oligonucleotides, the GAM501831 precursor RNA does not encode	code a
protein.	
GAM501831 precursor RNA folds onto itself, forming GAM501831 folded	
precursor RNA, herein designated GAM FOLDED PRECURSOR RNA, which has a	αI
two-dimensional "hairpin" structure. As is well-known in the art, this	ωl
"hairpin structure" is typical of RNA encoded by known miRNA precursor	ы
oligonucleotides and is due to the full or partial complementarity of	the
nucleotide sequence of the first half of an miRNA precursor to the	
nucleotide sequence of the second half thereof.	
A nucleotide sequence that is identical or highly similar to the nucleotide	leotide
sequence of the GAM501831 precursor RNA is designated SEQ ID NO:4204050,	50, and
is provided hereinbelow with reference to the sequence listing section.	اء
The nucleotide sequence designated SEQ ID NO:4204050 is located from	
position 164118 to position 164184 relative to the source sequence NC_001347	001347
(GenBank, NCBI), on the "+" strand on the genome of Human herpesvirus 5	5 A
schematic representation of a predicted secondary folding of GAM501831	ч.
folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA is set	et
forth in Table 4 incorporated herein.	
An enzyme complex composed of Dicer RNaseIII together with other necessary	ssary
proteins, designated DICER COMPLEX, cuts the GAM501831 folded precursor RNA	or RNA
yielding a single-stranded, ~22 nt-long RNA segment designated GAM501831	831
RNA, herein designated GAM RNA. Table 5 provides two possible nucleotide	ide
sequences of GAM501831 RNA: a nucleotide sequence that is highly likely to	ly to
be identical or extremely similar to the nucleotide sequence of GAM501831	1831
RNA and an alternative nucleotide sequence thereof, hereby incorporated	ed
herein.	
GAM501831 target gene, herein designated GAM TARGET GENE, encodes a	

	corresponding messenger RNA, designated GAM501831 target RNA, herein
desig	s is typical of mRNA of a protein-
	intranslated regio
	protein-coding region and a 3' untranslated region, designated 5'UTR,
	PROTEIN-CODING and 3'UTR, respectively.
GAM501831	1831 RNA, herein designated GAM RNA binds complementarily to one or
·	more target binding sites located in the untranslated regions of GAM501831
	target RNA. This complementary binding is due to the partial or full
	complementarity between the nucleotide sequence of GAM501831 RNA and the
	nucleotide sequence of each of the target binding sites. As an illustration,
	Fig. 1 shows three such target binding sites, designated BINDING SITE I,
	BINDING SITE II and BINDING SITE III, respectively. It is appreciated that
	the number of target binding sites shown in Fig. 1 is only illustrative and
that	any suitable number of target binding sites may be present. It is
further	er appreciated that although Fig. 1 shows target binding sites only in
the	3'UTR region, these target binding sites may instead be located in the
S'UTR	region or in both the 3'UTR and 5'UTR regions.
	The complementary binding of GAM501831 RNA, herein designated GAM RNA to
	target binding sites on GAM501831 target RNA, herein designated GAM TARGET
RNA,	such as BINDING SITE I, BINDING SITE II and BINDING SITE III, inhibits
	the translation of GAM501831 target RNA into respective GAM501831 target
protein,	in, herein designated GAM TARGET PROTEIN, shown surrounded by a broken
line.	
It is	appreciated that the GAM501831 target gene, herein designated GAM
	TARGET GENE, in fact represents a plurality of GAM501831 target genes. The
mRNA of	of each one of this plurality of GAM501831 target genes comprises one
or more	ore target binding sites, each having a nucleotide sequence which is at
	least partly complementary to GAM501831 RNA, herein designated GAM RNA and
	which when bound by GAM501831 RNA causes inhibition of translation of the

	GAM501831 target mRNA into a corresponding GAM501831 target protein.
	The mechanism of the translational inhibition that is exerted by GAM501831
	RNA, herein designated GAM RNA on one or more GAM501831 target genes, herein
	collectively designated GAM TARGET GENE, may be similar or identical to the
definition of the state of the	known mechanism of translational inhibition exerted by known miRNA
	oligonucleotides.
	The nucleotide sequence of GAM501831 precursor RNA, herein designated GAM
	PRECURSOR RNA, its respective genomic source and genomic location and a
	schematic representation of a predicted secondary folding of GAM501831
	folded precursor RNA, herein designated GAM FOLDED PRECURSOR RNA are set
	forth in Tables 3-4, hereby incorporated herein.
	The nucleotide sequences of a "diced" GAM501831 RNA, herein designated GAM
	RNA from GAM501831 folded precursor RNA are set forth in Table 5, hereby
	incorporated herein. The nucleotide sequences of target binding sites, such
	as BINDING SITE I, BINDING SITE II and BINDING SITE III of Fig. 1, found on
	GAM501831 target RNA, herein designated GAM TARGET RNA, and a schematic
	representation of the complementarity of each of these target binding sites
	to GAM501831 RNA, herein designated GAM RNA are set forth in Tables 6-7,
	hereby incorporated herein.
	It is appreciated that the specific functions and accordingly the utilities
	of GAM501831 RNA are correlated with and may be deduced from the identity of
	the GAM501831 target gene inhibited thereby, and whose functions are set
	forth in Table 8, hereby incorporated herein.

Table 3, lines 320140-320141, shows data relating to the source and location of the GAM oligonucleotide, specifically the GAM PRECURSOR (hairpin) and its position in the genomic sequence of Herpes virus 5.

SRC-END	OFFSET
STR SRC-START	AND OFFSET
SOURCE	
GAM NAME PRECUR GAM ORGANISM	SEQ-ID

164184 + 164118 NC_001347 GAM501831 420405 Human herpesvirus 5 The nucleotide sequence of GAM PRECURSOR RNAs, and a schematic representation of a predicted secondary folding of GAM SEQ ID NO: 4204050, beginning at the 5' end (beginning of upper row) to the 3' end (beginning of lower row), where the hairpin loop is hereby incorporated herein. Table 4, lines 599770-599773, shows a schematic representation of the GAM folded precursor as set forth in FOLDED PRECURSOR RNAs, of each of a plurality of GAM oligonucleotides that are described by Fig. 1 are set forth in Table 4, positioned at the right part of the drawing. [210]

GAM FOLDED PRECURSOR RNA PRECURSOR-SEQUENCE SEQ-ID ORGANISM

CTAAGTGACGGTGAGATCCA CTGTCGGA CCTAG GTG CAGTGA TC CG herpes virus 5 GTTACTCAGCGTCTGCCAGC GACAGCCT GGATC CAT GTTACT AG GT GACAGCCTCCGGATCACATG GAM501831 4204050 Human

forth in Table 5, hereby incorporated herein. Table 5, lines 239916 and 239917 shows the mature GAM RNA as set forth in SEQ ID NO: [211] The nucleotide sequence of "diced" GAM RNAs of each of a plurality of GAM oligonucleotides that are described by Fig. 1 are set 117937 as sliced by DICER from the GAM PRECURSOR sequence (hairpin) as set forth in SEQ ID NO: 4204050.

--------4204050 AGTGACGTGAGATCCAGGCTG GAM501831 Human herpesvirus 5 GAM NAME GAM ORGANISM

representation of the complementarity of each of these target binding sites to each of a plurality of GAM RNAs that are described by Fig. 1 The nucleotide sequences of target binding sites, such as BINDING SITE I, BINDING SITE II, and BINDING SITE III, that are set forth in Tables 6 –7, hereby incorporated herein. Table 6 shows data relating to the SEQ ID NO: of the GAM target binding site are found on GAM TARGET RNAs of each of a plurality of GAM oligonucleotides that are described by Fig. 1, and a schematic

ID NO: 3985198; line 6630929 relates to target binding site SEQ ID NO: 3983175; line 2093543 relates to target binding site SEQ ID NO: lines 2093540 and 2093541 relate to target binding site SEQ ID NO: 2034310; lines 6638580 and 6638581 relate to target binding site SEQ 2093283 relate to target binding site SEQ ID NO: 2034243; lines 6630926 and 6630927 relate to target binding site SEQ ID NO: 3983175; 2034310; line 6638583 relates to target binding site SEQ ID NO: 3985198; lines 2087866 and 2087867 relate to target binding site SEQ ID sequence to the TARGET gene name as bound by the GAM RNA as set forth in SEQ ID NO: 117937. Table 6, lines 2093282 and NO: 2032849; lines 663308 and 663309 relate to target binding site SEQ ID NO: 3983798; and line 2058344 relates to SEQ ID NO:

2024974.

TARGET BINDING	TARGET BINDING TARGET ORGANISM	TARGET	TARGET BINDING SITE
SITE SEQ-ID			SEQUENCE
2034243	Human herpesvirus 5	NC_001347 190696 - 19	NC_001347 190696 - 19 GCGTGCACCTGCTGCCGCCACT
	The party of the second	3236 gene	
3983175	Human herbesvirus 5	NC 001347 190696 - 19	NC 001347 190696 - 19 GCGTGCACCTGCTGCCGCCAČT
		3236 gene	
2034310	Human herpesvirus 5	NC_001347 190696 - 19 GCTGATCGCCGTCACT	GCTGATCGCCGTCACT
		3236 gene	
3985198	Human herpesvirus 5	NC_001347 190696 - 19 GCTGATCGCCGTCACT	GCTGATCGCCGTCACT
		3236 gene	
3983175	Human herpesvirus 5	NP_040085.1 gene	GCGTGCACCTGCCGCCACT
2034310	Human herpesvirus 5	NP_040085.1 gene	GCTGATCGCCGTCACT
3985198	Human herpesvirus 5	NP_040085.1 gene	GCTGATCGCCGTCACT

2032849	Human herpesvirus 5	C_001347 54824 -	560 GTCGCCGTCACT	
3083708	Himms harnassiris 5	95 gene NC 001347 54824 - 560		
		1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
2024974	Нимал	SFTPA1	TCCATCCTGAGGC	
le 7, lir	Table 7, lines 6493595-6493625 shows data relating to target-genes and binding sites of GAM oligonucleotides.	to target-genes and binding sites	of GAM oligonucleotides.	
GAM NAME	GAM ORGANISM GAM RNA TARGET TAR	TARGET TARGET TARGET	UTR BINDING SITE DRAW (UPPER:	GAM
	SEQUENCE BS-SEQ	REF-ID ORGANISM	TARGET; LOWER: GAM)	POS
11 0 0 0 0				
GAM501831	Human herpes AGTGACGG GCGTGCAC NC	0013 NC_001347 1 Human herpes	s 3 G C C GCTG C	۲
	virus 5 TGAGAICC CIGCIGCC 47	1906 93237 - 193 virus 5	GC TG A CT CCG CACT	
	AGGCTG GCCACT 96	- 19 637	CG AC T GA GGC GTGA	
	3236	e de	GT G C A GT A	
	n			
01831	GAM501831 Human herpes AGTGACGG GCGTGCAC NP_0400 NC_001347 1 Human herpes	0400 NC_001347 1 Human herpes	s 3 G C C GCTG C	Æ
:	virus 5 TGAGAICC CIGCIGCC 85.1	1 ge 93237 - 193 virus 5	GC TG A CT CCG CACT	
s	AGGCTG GCCACT ne	637	CG AC T GA GGC GTGA	
			GT G C A GT A	
GAM501831	Human herpes AGTGACGG GCTGATCG NC_0013 NC_001347	0013 NC_001347 1 Human herpes	s 3 G	Ą
	virus 5 TGAGAICC CCGTCACT 47	47 1906 93237 - 193 virus 5	GC TG ATC CCGTCACT	
	AGGCTG 96	- 19 637	CG AC TAG GGCAGTGA	
	3236	16 ge	GT G C AGI	
	ne		į	
501831	GAM501831 Human herpes AGTGACGG GCTGATCG NP 0400 NC 001347 1 Human herpes	0400 NC_001347 1 Human herpes	s 3 G	A
	virus 5 TGAGAICC CCGTCACT 85.1	1 ge 93237 - 193 virus 5	GC TG ATC CCGTCACT	
	AGGCTG ne	637	CG AC TAG GGCAGTGA	

			GT G C AGT	GT	
GAM501831 Human herpes	AGTGACGG GTCGCCGT	GAM501831 Human herpes AGTGACGG GTCGCCGT NC_0013 NC_001347 5 Human herpes 3	3		A
virus 5	TGAGATCC CACT	47 5482 4423 - 5482 virus 5	GTC G	CCGTCACT	
	AGGCTG .	4 - 560 3	ე ენე	GGCAGTGA	
		95 gene	GT A CTAGAGT	GI	
GAM501831 Human herpes	GCCTCCGG TCCATCCT	GAM501831 Human herpes GCCTCCGG TCCATCCT SFTPA1 NM_005411 Human	3	T	ω
virus 5	ATCACATG GAGGC		T CCAT	CC GAGGC	
	GITACT		A GGTA	GG CTCCG	
			D ATOMO TT OT	C 41	

whose functions are set forth in Table 8, hereby incorporated herein Table 8C, lines 4766438-4766618 shows data relating to the function and utilities of GAM RNA as set forth in SEQ ID NO: 117937. [213] It is appreciated that the specific functions and accordingly the utilities of each of a plurality of GAM oligonucleotides that are described by Fig. 1 are correlated with and may be deduced from the identity of the GAM TARGET GENES inhibited thereby, and

מוומ חחוות	S OI GAIN	ally durines of Orivi 1917 as set form in SEQ 1D 190. 117 201.	1 777 III III	D INO. I	1,201.	
GAM NAME	GAM RNA	GAM ORGANIS	M TARGET TA	TARGET	GAM FUNCTION	GAM
	SEQUENCE		OF	ORGANISM		POS
0 0 0 0 0 0	000000000000000000000000000000000000000	=======================================	======			
GAM501831	AGTGACGG	GAM501831 AGTGACGG Human herpes	NC_0013 Hu	ıman her	NC_0013 Human her GAM501831 is a viral miRNA-like oligonucleotide that is encode	A
	TGAGATCC virus	virus 5	47 1906 pe	svirus	47 1906 pesvirus d by the Human herpesvirus 5 genome, which targets a viral tar	
	AGGCTG		96 - 19 5		get gene NC_001347 190696 - 193236 gene (UTR reference: NC_001	
			3236 ge		347 193237 - 193637) as part of an internal viral regulation m	
			ne		echanism.	
					NC_001347 190696 - 193236 gene BINDING SITE 1 and NC_001347 19	
		in the second se			0696 - 193236 gene BINDING SITE 2 are viral target binding sit	
ļ					es that are found in the untranslated regions of mRNA encoded	
					by the NC_001347 190696 - 193236 gene gene, corresponding to t	
		and the second second			arget binding sites such as BINDING SITE I, BINDING SITE II or	
					BINDING SITE III of Fig. 1. The nucleotide sequences of NC_00	
					1347 190696 - 193236 gene BINDING SITE 1 and NC_001347 190696	
					- 193236 gene BINDING SITE 2, and the complementary secondary	

structur	structure to the nucleotide sequence of GAM501831 RNA are set
forth in	forth in Tables 6-7, hereby incorporated herein.
A functi	A function of GAM501831 is to inhibit NC_001347 190696 - 19323
, dene, 6	6 gene, a GAM501831 viral target gene which is associated with
Human h	Human herpesvirus 5 infection, as part of an internal viral r
egulatio	egulation mechanism. Accordingly, the utilities of GAM501831 i
nclude t	nclude the diagnosis, prevention and treatment of Human herpes
virus 5	virus 5 infection and associated clinical conditions.

	s NC_0013	a viral miRNA-like oligonucleotide that
TGAGATCC virus 5	47 1906 pesvirus	d by the Human herpesvirus 5 genome, which targets a viral tar
AGGCTG	96 - 19 5	get gene NC_001347 190696 - 193236 gene (UTR reference: NC_001
	3236 gene	347 193237 - 193637) as part of an internal viral regulation
		mechanism.
		NC_001347 190696 - 193236 gene BINDING SITE 1 and NC_001347 19
		0696 - 193236 gene BINDING SITE 2 are viral target binding sit
		es that are found in the untranslated regions of mRNA encoded
		by the NC_001347 190696 - 193236 gene gene, corresponding to t
		arget binding sites such as BINDING SITE I, BINDING SITE II or
		BINDING SITE III of Fig. 1. The nucleotide sequences of NC_00
		1347 190696 - 193236 gene BINDING SITE 1 and NC_001347 190696
		- 193236 gene BINDING SITE 2, and the complementary secondary
		structure to the nucleotide sequence of GAM501831 RNA are set
		forth in Tables 6-7, hereby incorporated herein.
		Another function of GAM501831 is to inhibit NC_001347 190696 -
		193236 gene, a GAM501831 viral target gene which is associate
		d with Human herpesvirus 5 infection, as part of an internal v
		iral regulation mechanism. Accordingly, the utilities of GAM50

1831 include the diagnosis, prevention and treatment of Human herpesvirus 5 infection and associated clinical conditions GAM501831 AGTGACGG Human herpes NC_0013 Human her GAM501831 is a viral miRNA-like oligonucleotide that is encode nding site that is a found in the the 3' untranslated region o f mRNA encoded by the NC_001347 54824 - 56095 gene gene, corre sponding to a target binding site such as BINDING SITE I, BIND ences of NC_001347 54824 - 56095 gene BINDING SITE, and the co with Human herpesvirus 5 infection, as part of an internal vir al regulation mechanism. Accordingly, the utilities of GAM5018 31 include the diagnosis, prevention and treatment of Human he d by the Human herpesvirus 5 genome, which targets a viral tar get gene NC_001347 54824 - 56095 gene (UTR reference: NC_00134 7 54423 - 54823) as part of an internal viral regulation mecha NC_001347 54824 - 56095 gene BINDING SITE is a viral target bi The nucleotide segu GAM501831 RNA are set forth in Tables 6-7, hereby incorporated mplementary secondary structure to the nucleotide sequence of Another function of GAM501831 is to inhibit NC_001347 54824 -56095 gene, a GAM501831 viral target gene which is associated rpesvirus 5 infection and associated clinical conditions ING SITE II or BINDING SITE III of Fig. 1. herein. nism. 47 5482 pesvirus 95 gene TGAGATCC virus 5 AGGCTG

GAM501831 AGTGACGG Human herpes NC_0013 Human her GAM501831 is a viral miRNA-like oligonucleotide that is encode 47 5482 pesvirus d by the Human herpesvirus 5 genome, which targets a viral tar get gene NC_001347 54824 - 56095 gene (UTR reference: NC_00134 - 560 5 TGAGATCC virus 5 AGGCIG

95 gene	7 54423 - 54823) as part of an internal viral regulation mecha
	nism.
	NC_001347 54824 - 56095 gene BINDING SITE is a viral target bi
	nding site that is a found in the the 3' untranslated region o
	f mRNA encoded by the NC_001347 54824 - 56095 gene gene, corre
	sponding to a target binding site such as BINDING SITE I, BIND
	ING SITE II or BINDING SITE III of Fig. 1. The nucleotide sequ
	ences of NC_001347 54824 - 56095 gene BINDING SITE, and the co
	mplementary secondary structure to the nucleotide sequence of
	GAM501831 RNA are set forth in Tables 6-7, hereby incorporated
	herein.
	Another function of GAM501831 is to inhibit NC_001347 54824 -
	56095 gene, a GAM501831 viral target gene which is associated
	with Human herpesvirus 5 infection, as part of an internal vir
	al regulation mechanism. Accordingly, the utilities of GAM5018
	31 include the diagnosis, prevention and treatment of Human he
	rpesvirus 5 infection and associated clinical conditions.

4									
pes NP_0400 Human her GAM501831 is a viral miRNA-like oligonucleotide that is encode	85.1 ge pesvirus d by the Human herpesvirus 5 genome, which targets a viral tar	get gene NP_040085.1 gene (UTR reference: NC_001347 193237 - 1	93637) as part of an internal viral regulation mechanism.	NP_040085.1 gene BINDING SITE 1 and NP_040085.1 gene BINDING S	ITE 2 are viral target binding sites that are found in the unt	ranslated regions of mRNA encoded by the NP 040085.1 gene gene	, corresponding to target binding sites such as BINDING SITE I	, BINDING SITE II or BINDING SITE III of Fig. 1. The nucleotid	e sequences of NP_040085.1 gene BINDING SITE 1 and NP_040085.1
rpes NP_0400 Human her	85.1 ge pesvirus	ne 5							
GAM501831 AGTGACGG Human her	TGAGATCC virus 5	AGGCTG							

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gene BINDING SITE 2, and the complementary secondary structur e to the nucleotide sequence of GAM501831 RNA are set forth in Tables 6-7, hereby incorporated herein. Another function of GAM501831 is to inhibit NP_040085.1 gene, a GAM501831 viral target gene which is associated with Human h erpesvirus 5 infection, as part of an internal viral regulatio n mechanism. Accordingly, the utilities of GAM501831 include t he diagnosis, prevention and treatment of Human herpesvirus 5 infection and associated clinical conditions.
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GAM501831 A	GAM501831 AGTGACGG Human herpes	NP_0400	Human her GAM501831 is a viral miRNA-like oligonucleotide that is encode A
I	TGAGATCC virus 5	85.1 ge pesvirus	d by the Human herpesvirus 5 genome, which targets a viral tar
A	AGGCTG	ne 5	get gene NP_040085.1 gene (UTR reference: NC_001347 193237 - 1
			93637) as part of an internal viral regulation mechanism.
			NP_040085.1 gene BINDING SITE 1 and NP_040085.1 gene BINDING S
			ITE 2 are viral target binding sites that are found in the unt
			ranslated regions of mRNA encoded by the NP_040085.1 gene gene
			, corresponding to target binding sites such as BINDING SITE I
			, BINDING SITE II or BINDING SITE III of Fig. 1. The nucleotid
			e sequences of NP_040085.1 gene BINDING SITE 1 and NP_040085.1
			gene BINDING SITE 2, and the complementary secondary structur
			e to the nucleotide sequence of GAM501831 RNA are set forth in
			Tables 6-7, hereby incorporated herein.
			Another function of GAM501831 is to inhibit NP_040085.1 gene,
			a GAM501831 viral target gene which is associated with Human h
		and the second s	erpesvirus 5 infection, as part of an internal viral regulatio
			n mechanism. Accordingly, the utilities of GAM501831 include t
			he diagnosis, prevention and treatment of Human herpesvirus 5

infection and associated clinical conditions.

hos	4	, res d		41	es I	BI	ΗI	<u>al</u>	15	her		<u>[]3</u>	ان ان	ارة	abo	اه	ח	티		<u>s</u>	St		Je B
d by the Human herpesvirus 5 genome, which targets a human hos	t gene Surfactant, pulmonary- associated protein Al (SFTPA1,	ccession number: NM_005411) as part of a viral host-attacking	mechanism.	SFTPA1 BINDING SITE is a human target binding site that is a	ound in the the 3' untranslated region of mRNA encoded by the	SFTPA1 gene, corresponding to a target binding site such as	NDING SITE I, BINDING SITE II or BINDING SITE III of Fig. 1.	he nucleotide sequences of SFTPA1 BINDING SITE, and the comple	mentary secondary structure to the nucleotide sequence of GAM5	01831 RNA are set forth in Tables 6-7, hereby incorporated by	ein.	Another function of GAM501831 is to inhibit SFTPA1, a GAM50183	1 human target gene which is involved in lipids and carbohydra	tes metabolisim. SFTPA1 is associated with Human herpesvirus	infection, and therefore GAM501831 is associated with the	vementioned infection, as part of a novel viral mechanism of	ttacking a host. Accordingly, the utilities of GAM501831 inclu	de the diagnosis, prevention and treatment of Human herpesviru	s 5 infection and associated clinical conditions.	The function of SFTPA1 and its association with various diseas	es and clinical conditions has been established by previous	udies, as described hereinabove with reference to GAM336913	GAM501831 is a viral miRNA-like oligonucleotide that is encode
GAMDOLOSI GCCICCGG numan neipes Stifai numan ATCACATG virus 5	GTTACT			and the second s					A STATE OF THE PARTY OF THE PAR														GAM501831 GCCTCCGG Human herpes SFTPA1 Human

GTTACT	t gene Surfactant, pulmonary- associated protein Al (SFTPA1, A
	ccession number: NM_005411) as part of a viral host-attacking
	11041001
	SFTPA1 BINDING SITE is a human target binding site that is a f
	ound in the the 3' untranslated region of mRNA encoded by the
	SFTPAl gene, corresponding to a target binding site such as BI
	NDING SITE I, BINDING SITE II or BINDING SITE III of Fig. 1. T
	he nucleotide sequences of SFTPA1 BINDING SITE, and the comple
	mentary secondary structure to the nucleotide sequence of GAM5
	01831 RNA are set forth in Tables 6-7, hereby incorporated her
	ein.
	Another function of GAM501831 is to inhibit SFTPA1, a GAM50183
	1 human target gene which is involved in lipids and carbohydra
	tes metabolisim. SFTPA1 is associated with Human herpesvirus 5
	infection, and therefore GAM501831 is associated with the abo
	vementioned infection, as part of a novel viral mechanism of a
	ttacking a host. Accordingly, the utilities of GAM501831 inclu
	de the diagnosis, prevention and treatment of Human herpesviru
	s 5 infection and associated clinical conditions.
	The function of SFTPA1 and its association with various diseas
	es and clinical conditions has been established by previous st
	udies, as described hereinabove with reference to GAM336913.

[214] Studies documenting the well known correlations between each of a plurality of GAM TARGET GENES that are described by Fig. 1 and the know gene functions and related discusses are listed in Table 9, hereby incorporated herein. Figure 9, lines 40832-40882, shows the GAM target genes and information related to the target gene.

pulmonary surfactant-associated protein is encoded on chromosome 10. Hum. Genet. Bruns, G.; Stroh, H.; Veldman, G. M.; Latt, S. A.; Floros, J.: The 35 kd SFTPA1 Human

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SFTPA1	Human	Fisher, J. H.; Kao, F. T.; Jones, C.; White, R. T.; Benson, B. J.; Mason, R. J.: The coding sequence for the 32,000-dalton pulmonary surfactant-associated protein A is located on chromosome 10 and identifies two separate restriction-fragment-length polymorphisms. Am. J. Hum. Genet. 40: 503-511, 1987.
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